

Remarks

Reconsideration of this Application is respectfully requested.

Claims 46-70 are pending in the application, with claims 46 and 64 being the independent claims. Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejection under 35 U.S.C. § 112

Claims 46-70 were rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. Specifically, the Examiner states "[a]fter a search of the words simultaneous(ly) and parallel, in the original specification, Examiner was not able to find determining security association with each data packet in a plurality of data packets with a data flow between a source and destination simultaneously. It appears that the claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." (Office Action, p. 3.)

Applicants respectfully traverse. "To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonable conclude that the inventor had possession of the claimed invention." MPEP § 2263.I. In contrast to the Examiner's assertion, Applicants' specification unequivocally describes determining security association information for the plurality of data packets simultaneously.

The specification discloses, for example, an Advanced Classification Engine (ACE) that "functions as a complete hardware IPsec Security Association Database lookup engine." (Specification, p. 21, ll. 3-4.) The specification further states that the ACE has "fully pipelined non-blocking out-of order design. Four datagrams can be *processed simultaneously* and out of order to keep throughput at fully rated wirespeed." (Specification, p. 21, ll. 18-20.) (emphasis added.) Additionally, the specification explains that the design of the ACE is "fully pipelined, such that multiple headers are in different stages of ACE processing at any given time. In addition, ACE implements non-blocking out-of-order processing of up to four packets." (Specification, p. 25, ll. 3-6.)

Accordingly, Applicants' specification sufficiently describes "wherein the classification module is configured to determine the security association information for the plurality of data packets simultaneously" as recited in independent claim 46 and "simultaneously determining security association information associated with each data packet in the plurality of data packets in the data flow," as recited in independent claim 64.

Reconsideration and withdrawal of this rejection as to independent claims 46 and 64 and their respective dependent claims 47-63 and 65-70 are respectfully requested.

Rejections under 35 U.S.C. § 103

Feiken and Oskouy

Claims 46-49, 55-57, 60, and 64-66 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Feiken *et al.*, U.S. Patent No. 5,870,479 ("Feiken")

in view of Oskouy *et al.*, U.S. Patent No. 6,791,947 ("Oskouy"). Applicants respectfully traverse this rejection.

The combination of Feiken and Oskouy fails to disclose each and every feature of independent claims 46 and 64. Feiken describes an identification unit that processes data packet headers in sequence. In Feiken, a "data packet which enters the device 1 is first temporarily stored in the buffer 10. During this time, the header of the packet is copied to the identification unit 14, where the channel (in the case of ATM, the virtual channel or the virtual path) of the data packet is determined." (Feiken, col. 3, line 66 - col. 4, line 3.) Using this identification, the control unit "activates the other sections of the device." (Feiken, col. 4, lines 3-7.) In Feiken, "the buffer 10 is instructed to release the data packet concerned, while the memory 13 is instructed to place the information belonging to said channel (for example, the key and the status of the encrypting/decrypting procedure, and optionally the software of a processing) on the bus 15." (Feiken, col. 4, lines 8-14.)

Thus, Feiken fails to disclose at least the feature of "a classification module in the device that determines security association information associated with each data packet in a plurality of data packets associated with a data flow between a source and destination, wherein the classification module is configured to determine the security association information for the plurality of data packets simultaneously," as recited in independent claim 46 and "receiving, in the device, at least a portion of a header for each data packet in a plurality of data packets associated with a data flow between a source and destination; simultaneously determining security association information

associated with each data packet in the plurality of data packets in the data flow," as recited in independent claim 64.

The Examiner acknowledges that Feiken "does not explicitly state that the classification module is configured to determine the security association information associated for the plurality of data packets simultaneously." (Office Action, p. 4.) However, the Examiner alleges that Oskouy provides this missing teaching. Applicants respectfully disagree.

Oskouy generally describes a "method and apparatus for in-line processing a data packet while routing the packet through a router in a system transmitting data packets between a source and a destination over a network including the router." (Oskouy, Abstract.) In Oskouy, a L3 header parser "examines L3 header data while snooping on the bus to derive values for the various L3 flags stored in a cell header." (Oskouy, 11:6-9.) An L2 header parser "derives a series of L2 flags while processing the L2 header." (Oskouy, 11:9-10.) The flags derived by the L2 and L3 parsers include a packet loss priority flag, a send packet to processor flag, a sample packet flag, a physical multicast flag, an option flag, a packet priority flag, a transmission control protocol (TCP) flag, a protocol type flag, and a don't fragment (DF) flag. In the Office Action, the Examiner equates these L2 and L3 flags to "security association information." Applicants respectfully disagree.

A security association provides a mechanism to associate security services and key(s) with traffic to be protected and the parties with whom traffic is being exchanged. The specification repeatedly explains that security association information includes at a minimum cryptographic keys. (Specification, p. 8, ll. 9-10;

p. 11, ll. 1-2; p. 12, ll. 3-5; p. 23, ll. 6-10.) This is supported by the Internet Engineering Task Force (IETF) that defines a security association and outlines required security association information to be stored in a security association database for retrieval. *See e.g.*, IETF RFC 2401. The IETF required security association information includes sequence number, anti-reply data, authentication algorithm and keys for IPSec authentication header (AH) implementations and IPSec encapsulating security payload (ESP) implementations, and encryption algorithm and keys for IPSec ESP implementation, and lifetime of the security association. *See* IETF RFC 2401, p. 21.

As would be appreciated by a person of skill in the art, the L2 and L3 flags are not security association information. Accordingly, Oskouy also does not disclose at least the feature of "a classification module in the device that determines security association information associated with each data packet in a plurality of data packets associated with a data flow between a source and destination, wherein the classification module is configured to determine the security association information for the plurality of data packets simultaneously," as recited in independent claim 46 and "receiving, in the device, at least a portion of a header for each data packet in a plurality of data packets associated with a data flow between a source and destination; simultaneously determining security association information associated with each data packet in the plurality of data packets in the data flow," as recited in independent claim 64.

Accordingly, the combination of Feiken and Oskouy fails to teach or suggest each and every feature of independent claims 46 and 64. For at least the above

reasons, independent claims 46 and 64 are patentable over the combination of Feiken and Oskouy. Claims 47-49, 55-57, and 60 depend from claim 46 and claims 65 and 66 depend from claim 64. For at least the above reasons, and further in view of their own features dependent claims 47-49, 55-57, 60, 65, and 66 are patentable over the combination of Feiken and Oskouy. Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Feiken, Oskouy, and Ellis

Claims 50-54, 58, 59, 61, and 62 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Feiken and Oskouy further in view of Ellis, U.S. Patent No. 6,484,257 (Ellis). Applicants respectfully traverse this rejection.

Claims 50-53, 58, 59, 61, and 62 depend from claim 46. Ellis does not overcome all of the deficiencies of the combination of Feiken and Oskouy relative to independent claim 46. For at least this reason, and further in view of their own features, claims 50-54, 58, 59, 61, and 62 are patentable over the combination of Feiken, Oskouy and Ellis.

Feiken, Oskouy, and Leung

Claims 67-70 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Feiken and Oskouy further in view of Leung, U.S. Patent No. 6,760,444 (Leung). Applicants respectfully traverse this rejection.

Claims 67-70 depend from claim 64. Leung does not overcome all of the deficiencies of the combination of Feiken and Oskouy relative to independent claim 64. For at least this reason, and further in view of their own features, claims 67-70 are patentable over the combination of Feiken, Oskouy, and Leung.

Feiken, Oskouy, and Ober

Claim 63 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Feiken and Oskouy further in view of Ober, et al, U.S. Patent No. 6,708,273 (Ober). Applicants respectfully traverse this rejection.

Claim 63 depends from claim 46. Ober does not overcome all of the deficiencies of the combination of Feiken and Oskouy relative to independent claim 46. For at least this reason, and further in view of its own features, claim 63 is patentable over the combination of Feiken, Oskouy. and Ober.

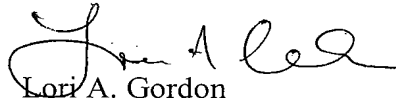
Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Lori A. Gordon".

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